UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF RHODE ISLAND

Uniloc USA, Inc. and Uniloc Singapore Private Limited, Plaintiffs, v. Microsoft Corporation, Defendant.	C.A. No. 03-440S

DECISION AND ORDER

WILLIAM E. SMITH, United States District Judge

Plaintiffs Uniloc USA, Inc. and Uniloc Singapore Private Limited (collectively referred to as "Uniloc") have filed this patent infringement action against Microsoft Corporation ("Microsoft") for allegedly infringing Uniloc's United States Patent Number 5,490,216 ("the '216 Patent"). In general terms, the '216 Patent provides a system for software registration that is directed towards reducing the unauthorized use of software by allowing "digital data or software to run in a use mode on a [computer] platform if and only if an appropriate licensing procedure has been followed." '216 Patent, col. 2, ll. 53-55.

So that the issues in this litigation may be properly framed before motions for summary judgment are filed, the parties have submitted a joint designation of 24 patent claim terms to be construed by the Court. See Dkt. Entry No. 133. After extensive

briefing, a technical tutorial, and a Markman hearing, see Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed. Cir. 1995), this decision provides the Court's construction of the claim terms and phrases disputed by the parties.

I. Claim Construction Principles

"It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude." Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1115 (Fed. Cir. 2004). Patent infringement analysis consists of two steps: first, the court must determine the correct meaning and scope of the patent claims; second, the court must compare the correctly construed claims to the allegedly infringing device. See Playtex Prods., Inc. v. Proctor & Gamble Co., 400 F.3d 901, 905-06 (Fed. Cir. 2005). Claim construction presents a question of law to be determined by a judge. See Pfizer, Inc. v. Teva Pharms. USA, Inc., 429 F.3d 1364, 1373 (Fed. Cir. 2005). In construing claim terms, district courts are to give claim terms "their ordinary and customary meaning," which is the meaning the terms "would have to a person of ordinary skill in the art in question at the time of the invention." Phillips v. AWH Corp., 415 F.3d 1303, 1312-13 (Fed. Cir. 2005). "In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such

cases involves little more than the application of the widely accepted meaning of commonly understood words." Id. at 1314. On such occasions, general purpose dictionaries may assist the court in ascertaining the correct construction of the claims. Id.

On the other hand, in a situation, where the claim terms are not so readily susceptible to interpretation, Phillips outlines what sources the district court may consider and gives guidance as to how much weight to give a particular source. First and foremost, the intrinsic record, which consists of the claims themselves, the remainder of the specification,[1] and, where relevant, the prosecution history,[2] provides the best guidance as to a claim's meaning. Id. at 1313-15. Among the sources of intrinsic evidence, Phillips places primary importance on the

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[1] A patent specification is defined in 35 U.S.C. § 112 as follows:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.
>
> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

[2] The prosecution history "consists of the complete record of the proceedings before the PTO [the Patent and Trademark Office] and includes the prior art cited during the examination of the patent." Phillips at 1317.

claims themselves and the specification because the context in which a term is used in the asserted claim and the use of the term in other claims can be "highly instructive." Id. at 1314. Thus, the specification "is the single best guide to the meaning of a disputed term." Id. at 1315. Indeed, it is "entirely appropriate for a court, when conducting claim construction, to rely heavily on the written description for guidance as to the meaning of the claims." Id. at 1317. Nonetheless, Phillips warned of "the danger of reading limitations from the specification into the claim." Id. at 1323. In other words, the Court "must use the written description for enlightenment and not to read a limitation from the specification." Playtex, 400 F.3d at 906.

Although generally not as useful in construing a claim as the specification, the court may consider the prosecution history if it is in evidence. Like the specification, the prosecution history "can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." Phillips at 1317; see also Chimie v. PPG Indus., Inc., 402 F.3d 1371, 1384 (Fed. Cir. 2005) ("The purpose of consulting the prosecution history in construing a claim is to exclude any interpretation that was disclaimed during prosecution.") (internal quotations and citation omitted). Trial courts must remember,

however, that because the prosecution history "represents an ongoing negotiation between the PTO and the applicant," it is less useful for claim construction purposes. Phillips, 415 F.3d at 1317.

Additionally, extrinsic evidence, such as dictionaries, treatises, and expert testimony, may provide guidance in certain circumstances, but these sources should be used with some degree of caution. Specifically, technical dictionaries are helpful to the extent that they assist a court to "better understand the underlying technology and the way in which one of skill in the art might use the claim terms." Id. at 1318. Expert testimony is also valuable for providing background on the technology at issue, explaining how an invention works, or describing a distinctive use of a term in a particular field. However, neither dictionaries nor expert testimony are entirely reliable sources for claim interpretation for a variety of reasons. Phillips opined, for example, that expert testimony, which is "generated at the time of and for the purpose of litigation," is "less reliable" than the patent itself in defining claim terms. Id. at 1318. Therefore, expert testimony should be rejected when it "is clearly at odds with the claim construction mandated by the claims themselves." Id.

Ultimately, there is no magic formula for conducting claim construction when the ordinary meaning of the disputed terms as

understood by a person of skill in the art is not readily apparent. Id. at 1324. The Court should concentrate on giving appropriate weight to each "source in light of the statutes and policies that inform patent law." Id. This equates to attaching the most significance to the claims and the specification, followed by the prosecution history, and finally by extrinsic sources. Id.

In addition to these general principles, the Court notes that under 35 U.S.C. § 112, ¶ 6, a "means-plus-function" claim requires a more particular interpretative approach. Specifically, a "means-plus-function" claim "shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. § 112, ¶ 6. This approach "restrict[s] a functional claim element's broad literal language . . . to those means that are 'equivalent' to the actual means shown in the patent specification." Al-Site Corp. v. VSI Int'l, Inc., 174 F.3d 1308, 1320 (Fed. Cir. 1999). The Federal Circuit "has established a framework for determining whether the elements of a claim invoke means-plus-function treatment." Micro Chem., Inc. v. Great Plains Chem. Co., Inc., 194 F.3d 1250, 1257 (Fed. Cir. 1999). If the word "means" appears in a claim element in association with a function, there is a presumption that § 112, ¶ 6, applies. This presumption collapses, however, if the claim itself recites sufficient structure, material, or acts to perform the claimed function. Without the term "means," a claim element is

presumed to fall outside means-plus-function strictures. Once again, however, that presumption can collapse when an element lacking the term "means" nonetheless relies on functional terms rather than structure or material to describe performance of the claimed function. Id.

The construction of a means-plus-function claim is a two-step process: first, the function must be determined; then, the corresponding structure as described in the specification must be identified. See JVW Enters., Inc. v. Interact Accessories, Inc., 424 F.3d 1324, 1330 (Fed. Cir. 2005). In determining the function, "[t]he court must construe the function of a means-plus-function limitation to include the limitations contained in the claim language, and only those limitations. It is improper to narrow the scope of the function beyond the claim language. It is equally improper to broaden the scope of the claimed function by ignoring clear limitations in the claim language. Ordinary principles of claim construction govern interpretation of the claim language used to describe the function." Cardiac Pacemakers, Inc. v. St. Jude Med., Inc., 296 F.3d 1106, 1113 (Fed. Cir. 2002) (internal citations omitted). Turning to the second step, a structure in the specification is a "corresponding structure" if "the specification or prosecution history clearly links or associates that structure to the function recited in the claim." Medtronic, Inc., v. Advanced Cardiovascular Sys., Inc., 248 F.3d 1303, 1311 (Fed. Cir.

2001).

Having set forth the guiding claim construction principles, the Court now turns to the various disputed claim terms in this case as set forth by the parties in their joint designation of claim terms to be construed. See Dkt. Entry No. 133.

II. Disputed Claim Terms

In true gladiatorial spirit reflecting the high stakes in this fight, the parties manage to disagree on the construction of no less than 24 claim terms, with the parties battling more vigorously over the construction of some terms than others. Considering the breadth and number of claim terms to be construed, for ease of discussion, this Court has adopted the structure of Microsoft's claim construction brief and grouped the claim terms into the following five categories: (1) licensee unique ID and its generation; (2) modes/mode switching means; (3) user interaction requirements; (4) claim 12 and its dependent claims; and (5) platform unique ID generating means.

A. Licensee unique ID and its generation

Claim Terms	**Uniloc's proposed construction**	**Microsoft's proposed construction**	**Court's construction**
1. Licensee unique ID/Security key 2. Registration key 3. Enabling key	A unique identifier associated with a licensee	A one of a kind (i.e. unique) identifier that is entirely the product of data about the user, not the platform, generated locally, and that is not the product of either (1) data added before delivery of the software to the local location for use (such as a sequence of characters provided by the software vendor, for example, on a printed label accompanying the software), or (2) data added subsequently from a remote location (such as from the software vendor), and where the uniqueness of the identifier is provided entirely by the end user in the course of supplying his or her own identifying user details	**A unique identifier associated with a licensee**

Initially, the Court notes that the parties have not entirely agreed that these three terms should be construed synonymously. On June 9, 2006, the parties filed a joint submission in which

Microsoft stated the terms were synonymous, while Uniloc took the cautious position that the terms should only be treated synonymously under Uniloc's proposed construction. Because the Court ultimately does not construe these terms to include the limitations set forth by Microsoft, these terms are treated synonymously and references in this decision to the term "licensee unique ID" should be understood to also include the terms "security key," "registration key," and "enabling key."

Uniloc's construction is relatively straightforward, but attacked by Microsoft as "fatally ambiguous" and "completely unsupported by anything in either the intrinsic or extrinsic record." In response, Uniloc argues that Microsoft's construction improperly attempts to read in a host of limitations and "transform these simple two and three-word claim limitations into a 104-word tongue twister." This energetic first battle highlights three main points of disagreement: (1) the meaning of unique; (2) whether the licensee unique ID may be based upon vendor information (such as a product number provided on the vendor label of a compact disc); and (3) whether the licensee unique ID must be based upon prospective user information (such as name, address, credit card number), and not platform information (such as the current time on the computer system).

1. Unique

As the first part of its proposed construction, Microsoft, relying upon a dictionary definition of the word "unique,"[3] takes the position that the uniqueness of the identifier must be "one-of-a-kind," somewhat akin to DNA uniqueness. The Court finds, however, that this proposed construction is inconsistent with the language of the '216 Patent itself. The '216 Patent clearly contemplates that the licensee unique ID will consist of varying levels of uniqueness that are wholly dependent upon the inputs used to formulate the licensee unique ID. For example, the '216 Patent states:

> The algorithm provides a registration number which can be "unique" if the details provided by the intending licenses upon which the algorithm relies when executed upon the platform are themselves "unique".

'216 Patent, Abstract. Moreover, the '216 Patent provides:

> In any event, in particular preferred forms, a serial number (see further on) is included in the registration number generation algorithm which introduces an additional level of uniqueness into the registration number calculation process.

Id. at col. 6, ll. 23-26.

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[3] Microsoft relies upon The American Heritage Dictionary of the English Language, Fourth Edition which provides in relevant part:

> **unique** (adj.) 1. Being the only one of its kind: *the unique existing example of Donne's handwriting.* 2. Without an equal or equivalent; unparalleled. 3a. Characteristic of a particular category, condition, or locality: *a problem unique to coastal areas.* b. *Informal* Unusual; extraordinary: *spoke with a unique accent.*

Thus, as Microsoft correctly recognizes in its claim construction brief, "the '216 patent suggests that 'unique' is a relative term[.]" To construe the word unique to mean no possibility of duplication would simply be inconsistent with the specification.

2. Vendor and Information

The parties next dispute whether the licensee unique ID may be derived from vendor information. This dispute arises because Microsoft's proposed construction is premised upon the argument that during the prosecution, Uniloc affirmatively and categorically disclaimed the use of any information from the software vendor to generate the licensee unique ID.

In resolving this issue, the Court first turns to the language of the '216 Patent and notes that there is no language in the claims, or anywhere in the specification for that matter, prohibiting the use of vendor information to create the licensee unique ID. To the contrary, the Court finds language in the specification supporting the notion that vendor information may indeed be an input to creating the licensee unique ID. For instance, figure 4 of the '216 Patent, which is discussed in the context of the third embodiment, contemplates that a "PRODUCT NO." may be used in the generation of the registration number. Moreover, in the sixth embodiment, the '216 Patent provides:

> The algorithm, in this embodiment, combines by addition the serial number 50 with the software product

> name 64 and customer information 65 and previous user identification 22 to provide registration number 66.

'216 Patent, col. 11, ll. 53-56 (emphasis added). The sixth embodiment also references figure 9, which contemplates that a "PRODUCT NAME" may be one of the numbers used in the creation of a registration number. Finally, the seventh embodiment, which references figure 10, provides:

> Additionally, product information P derived from media 82 (typically via platform 83) or else via the intermediary of the user (signified by the small man symbol) is provided to encoder/decoder 84 and to summer 85.
>
> * * * * *
>
> Summer 85 acts as a local licensee unique ID generating means by combining, by addition, customer information C, product information P and serial number S in order to provide a local licensee unique ID here designated Y.

Id. at col. 12, ll. 54-57, 61-64 (emphases added).

Consideration of the prosecution history does not change this result. It is well established that "[t]he prosecution history limits the interpretation of claim terms so as to exclude any interpretation that was disclaimed during prosecution." Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1576 (Fed. Cir. 1995). It must also be remembered, however, that the prosecution history represents a dialogue between the PTO and the inventor and thus, often lacks the clarity and usefulness of the specification. See Phillips, 415 F.3d at 1317. Because of these concerns, and to balance the importance of public notice and the right of patentees

to seek broad coverage, the Federal Circuit has "consistently rejected prosecution statements too vague or ambiguous to qualify as a disavowal of claim scope." Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314, 1325 (Fed. Cir. 2003). "Consequently, for prosecution disclaimer to attach, [the Federal Circuit] requires that the alleged disavowing actions or statements made during prosecution be both clear and unmistakable." Id. at 1325-26.

Microsoft first asserts that applicant disclaimed the use of vendor information by pointing to the following statements:

> It is inherent in the system of the present application, as claimed, that the "Licensee Unique ID" is entirely the product of data generated locally as distinct from data added before delivery of the software to the local location for use (thereby distinguishing over Chou) or subsequently from a remote location (thereby distinguishing over Grundy).
>
> The fundamental principles underlying the operation of the present invention are simple yet highly effective. The uniqueness of identity by which each copy of the software to be protected is distinguished from any other copy is provided by each and only each new user: to reiterate the system does not require the introduction of any unique identifiers from any other source, either before delivery of the software for use by the intending user or subsequent to delivery thereof.

UNILOC 0143-44.[4] These statements, when considered in context, are reasonably subject to an interpretation other than the one set forth by Microsoft. Microsoft reads these statements to

[4] The prosecution history in this case is attached as Exhibit B to the Declaration of David Klausner. Because the parties are familiar with the various documents that comprise the prosecution history, for ease of reference, the Court will simply cite the prosecution history by Bates Number, i.e., "UNILOC xx."

differentiate local and remote inputs and to disclaim the use of vendor information. In the statements, however, the applicant simply reiterated that the system does not require the use of vendor-supplied information, not that vendor-supplied information is banned absolutely. Moreover, the statements in the prosecution history immediately prior to the cited excerpt could be read to imply that the references to local and remote actually refer to the location of where the licensee unique ID is generated, and not the inputs of the licensee unique ID:

> In response, the Applicant submits herewith redrafted claims, the main claims of which include, broadly, the following two distinguishing limitations:
> (a) The "Licensee Unique ID" on which the registration system relies for matching for verification purposes is generated locally, and
> (b) The algorithm used to generate locally the "Licensee Unique ID" is replicated remotely for the purposes of remote generation of a separate "Licensee Unique ID" for matching purposes.

UNILOC 0143. This reading is bolstered by the fact that the PTO and the applicant appear to have agreed during the prosecution that the use of vendor information was contemplated. At one point, the PTO stated:

> There is, however, no indication in Grundy that this information cannot be provided to the local user, nor is there any limitation in the claims which would prohibit vendor information from being part of the authorization process.

UNILOC 0135. In response, Uniloc stated:

> In the Examiner's last paragraph relating to Grundy, the Examiner argues that Grundy does not preclude providing additional information to the local user. The fact, if true, that Grundy does not teach away from providing the information does not therefore mean that Grundy teaches that the information is provided or that doing so would be obvious.

UNILOC 0146. This exchange, at a minimum, could be read as a tacit acknowledgment by the PTO and the applicant that the claims of the '216 Patent allow use of vendor information. When taken in the full context of the prosecution history, as well as the language in the specification, the statements cited by Microsoft are not so clear and unmistakable as to constitute prosecution disclaimer.

3. User and Platform Information

Finally, Microsoft asserts that the specification and prosecution history show that the licensee unique ID "is based only on local information about the user, rather than information about the user's computer [i.e., platform information]." Again, the Court turns to the language of the '216 Patent and notes that there is no language in the claims themselves, or anywhere in the intrinsic evidence for that matter, stating that user information is always a necessary input in the generation of a licensee unique ID. Nor is there any language in the specification implying that platform information may not be used to generate a licensee unique ID. To the contrary, the Court finds language in the claim terms as well as the rest of the specification indicating that platform information may be used in creating the licensee unique ID. For

instance, the '216 Patent provides that platform information may be used to create a serial number, which may then be combined with user information to create a licensee unique ID:

> After selecting "continue", the registration routine begins the first step in the generation of a security key which will be unique to the current copy of the software and to certain features of the environment in which it runs.
>
> As shown in FIG. 2b, the first step in the generation of the security key comprises the generation of a serial number generated from the current time on the system and, in this example, the last modify date of the software and other information from the computer environment.

'216 Patent, col. 6, ll. 63-67; col. 7, ll. 1-5 (emphasis added). Additionally, claims 13 and 14 provide:

> 13. The registration system of claim 12, wherein said security key is generated by a registration number algorithm.
>
> 14. The registration system of claim 13, wherein said registration number algorithm combines information entered by a prospective registered user unique to that user with a serial number generated from information provided by the environment in which the software to be protected is to run.

Id. at col. 14, ll. 50-56 (emphasis added). The summary of the invention section of the '216 Patent also contemplates use of platform information in generating the security key:

> Preferably, the security key is generated by a registration number algorithm.
>
> Preferably, the registration number algorithm combines information entered by a prospective registered user unique to that user with a serial number generated from information provided by the environment in which the software to be protected is to run (e.g., system clock, last modify date, user name).

Id. at col. 4, ll. 4-11 (emphasis added).

The language and structure of the claims also convinces the Court that Microsoft's proposed construction would violate the doctrine of claim differentiation. Claim differentiation "refers to the presumption that an independent claim should not be construed as requiring a limitation added by a dependent claim." Curtiss-Wright Flow Control Corp. v. Velan, Inc., 438 F.3d 1374, 1380 (Fed. Cir. 2006) (citing Nazomi Commc'ns, Inc. v. Arm Holdings, PLC, 403 F.3d 1364, 1370 (Fed. Cir. 2005)). In the '216 Patent, independent claim 1 says nothing about the licensee unique ID being generated from user information. Claim 1 states in full:

> A registration system for licensing execution of digital data in a use mode, said digital data executable on a platform, said system including local licensee unique ID generating means and remote licensee unique ID generating means, said system further including mode switching means operable on said platform which permits use of said digital data in said use mode on said platform only if a licensee unique ID first generated by said local licensee unique ID generating means has matched a licensee unique ID subsequently generated by said remote licensee unique ID generating means; and wherein said remote licensee unique ID generating means comprises software executed on a platform which includes the algorithm utilized by said local licensee unique ID generating means to produce said licensee unique ID.

'216 Patent, col. 13, ll. 54-67 - col. 14, l. 1. Dependent claims 2 and 6, which depend from claim 1, add limitations to the algorithm inputs discussed in claim 1. Claim 2 provides:

> The system of claim 1, wherein said local licensee unique ID generating means generates said local licensee unique ID by execution of a registration algorithm which combines information in accordance with said algorithm, said information uniquely descriptive of an intending

> licensee of said digital data to be executed in said use mode.

Id. at col. 14, ll. 2-7. And, claim 6 provides:

> The system of claim 5, wherein the information utilized by said local licensee unique ID generating means to produce said licensee unique ID comprises prospective licensee details including at least one of payment details, contact details and name.

Id. at col. 14, ll. 19-23. Thus, construing the term licensee unique ID as Microsoft suggests – as requiring that a licensee unique ID always be generated from user information - would simply render claims 2 and 6 meaningless (or at best, partially redundant) and violate the doctrine of claim differentiation.

It is true that every embodiment in the '216 Patent contemplates a licensee unique ID being generated, at least in part, from user information. But of course, the '216 Patent also states that the listed embodiments are "only some embodiments of the present invention and modifications, obvious to those skilled in the art, can be made thereto without departing from the scope and spirit of the present invention." Id. at col. 13, ll. 49-52. Moreover, the general rule is that "persons of ordinary skill in the art rarely would confine their definitions of terms to the exact representations depicted in the embodiments." Phillips, 415 F.3d at 1323.

Finally, to the extent Microsoft relies on the prosecution history to support its position, the Court finds that the statements cited by Microsoft are not so clear and unmistakable as

to constitute prosecution disclaimer.[5] While the statements do make reference to a licensee unique ID's uniqueness in relation to an end user's identification details, the overarching theme of the statements is not that user information is the only input, or even a necessary input in generating the licensee unique ID. Rather, it could be said that the import of these statements is simply to

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[5] In addition to citing that portion of the prosecution history previously relied upon in its vendor information argument, see UNILOC 0144, Microsoft also relies on the following prosecution history statements:

> Applicant respectfully submits that Chou is not particularly relevant to the claims of the present application because Chou covers a version of a hardware lock whereby each and every copy of the software to be protected must have unique identity information embedded in it at the time of manufacture so that it can communicate with a local hardware lock. In Chou, all communicating security devices are local. Therefore, with particular reference to pending Claim 1, for example, Chou does not include "local licensee unique ID generating means" as well as "remote license unique ID generating means". Current Claim 1 is therefore clearly patentably distinguished over Chou.
>
> Furthermore, an underlying "behavioral" feature of the present invention is that a single common algorithm is embedded in all copies of software to be protected. Hence, the software protected by the present invention does not need unique identifying numbers prestored in each copy of the software. The uniqueness is ultimately provided by the end users of the software in the course of supplying their own identification details, which details are subsequently checked by use of a matching algorithm at a remote location. This important behavioral feature of Applicant's claimed invention ("local licensee unique ID generating means") is nowhere to be found in Chou.

UNILOC 0128.

distinguish the prior art by stressing that under the present invention, the licensee unique ID is generated on the local side (and then matched at a remote location) without, as was necessary under the prior art, the need for "unique identifying numbers prestored in each copy of the software."

After consideration of the specification, which is "the single best guide to the meaning of a disputed term," see Phillips, 415 F.3d at 1315, and upon consideration of the prosecution history, the Court concludes that Microsoft's suggested limitations should not be part of the construction of the term licensee unique ID. Accordingly, these terms shall be construed as follows: **A unique identifier associated with a licensee**.[6]

[6] Although it was not relied upon, the Court notes that Uniloc's expert, David Klausner, opined that this construction is what one of ordinary skill in the art would understand the term licensee unique ID to mean.

Claim Terms[7]	**Uniloc's proposed construction**	**Microsoft's proposed construction**	**Court's construction**
4. Information uniquely descriptive of an intending licensee 5. Information . . . which uniquely identifies an intended registered user	Information, by itself or in combination, that is uniquely associated with the intended licensee	One-of-a-kind information that describes/ identifies a person who is not presently a licensee, but who intends in the future to license the digital data	**Information that is uniquely associated with a person who intends to become a licensee so as to access full functionality of the digital data**

The Court's previous analysis of the term "unique" is equally applicable here, and therefore, Microsoft's "one-of-a-kind" language will not be adopted. Thus, the main point of difference focuses on Microsoft's reading of the words "intending" and "intended" to mean that the user does not become a licensee until the user completes the registration process. Without relying on intrinsic or extrinsic evidence, Uniloc objects to this theory, arguing that the term licensee is distinct from registered user because "the user must be licensed by the software vendor to load the software into his or her computer in the first place." Having agreed to treat these terms synonymously, however, Uniloc now seems

[7] Pursuant to the June 9, 2006 joint submission, the parties have agreed that these claim terms should be construed synonymously.

to implicitly agree that a licensee is the same as a registered user - i.e., a user who has completed the registration process.

Nevertheless, even if Uniloc intends to press its objection, the Court notes that upon scrutinizing the claim terms in the context of claims 2 and 12, the ordinary meaning of the terms at issue becomes readily apparent by applying the widely accepted definitions of the adjectives "intended" and "intending" - both of which describe a person that expects in the future to be a licensee. See Merriam-Webster's Collegiate Dictionary 607 (10th ed. 2002) (defining "intended" as "expected to be such in the future" and defining "intending" as "prospective, aspiring"). Applying these ordinary meanings, an intended/intending licensee in claims 2 and 12 clearly refers to a person who has software on his or her computer and plans on becoming a licensee by registering the software so as to access the full functionality of the software. It is logical, therefore, that the user who intends to become a licensee cannot already be a licensee as that term is used in claims 2 and 12. The remainder of the specification supports this reading by explaining that prior to registration, a person uses the software in an unlicensed mode. For instance, in the explanation of use mode, the '216 Patent unambiguously states:

> In this specification, "use mode" refers to use of the digital data or software by its execution on a platform so as to fulfill the seller's/licensor's obligations in relation to the sale or license of the right to execute the digital data or software in the use mode. The use mode is to be distinguished from what

> might generally be termed unlicensed modes of operation (which is not to say unauthorized modes of operation) as typified by the demonstration modes later described in this specification.

See '216 Patent, col. 2, ll. 40-49 (emphasis added); see also id. at fig. 2a (illustrating that a user, after being able to try the software in a demonstation mode, then agrees to a licensing agreement upon registering).

Accordingly, the Court construes these terms as follows: **Information that is uniquely associated with a person who intends to become a licensee so as to access full functionality of the digital data**.

Claim Terms[8]	**Uniloc's proposed construction**	**Microsoft's proposed construction**	**Court's construction**
6. Local licensee unique ID generating means 7. Remote licensee unique ID generating means 8. Registration key generating means	Function: to create a local [or remote] licensee unique ID; Structure: software (e.g. algorithm) or hardware (e.g. summer)	This term is construed and applied in accordance with 35 U.S.C. § 112, ¶ 6. The functional aspect of this term requires the generation of a licensee unique ID/registration key. The sole corresponding structure disclosed in the specification for performing the function of this term is a summer.	**Function: to generate a local or remote licensee unique ID/registra-tion key** **Structure: a summation algorithm or a summer and equivalents thereof**

As an initial matter, all are in agreement that these claim terms are means-plus-function terms subject to treatment under 35 U.S.C. § 112, ¶ 6. The real dispute is over the structural component of these terms,[9] but even here, there is some common

[8] These terms are construed synonymously for the same reasons that the terms "licensee unique ID," "security key," "registration key," and "enabling key" were construed synonymously.

[9] The distinction between using the word "create" or "generate" to describe the function is ultimately one without a difference. But, to the extent that there is disagreement, the Court notes it has adopted "generate" because it is consistent with

ground. For instance, the parties agree that the '216 Patent discloses as corresponding structure both software, in the form of an algorithm, see '216 Patent, col. 11, ll. 53-56, and hardware, in the form of a summer. See id. at col. 12, ll. 62-65. The parties divide, however, over the issue of how specific the algorithm should be for construction purposes. Uniloc wishes to generalize the disclosed algorithm to any algorithm, while Microsoft trumpets that the structure should be limited to the algorithm specifically disclosed in the '216 Patent.

The issue of whether and when an algorithm constitutes a corresponding structure has received some attention from the Federal Circuit. In WMS Gaming, Inc. v. Int'l Game Tech., the Federal Circuit held that the district court erred when it determined that the structure for performing the "means for assigning" numbers function was "an algorithm executed by a computer" rather than the specific "algorithm disclosed in the specification." 184 F.3d 1339, 1348-49 (Fed. Cir. 1999). Uniloc, in an apparent attempt to counter the weight of this authority, has cited Tehrani v. Hamilton Med., Inc., 331 F.3d 1355, 1362 (Fed. Cir. 2003), and states that "an algorithm is considered structure for the purposes of construing a means plus function claim term."

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the language of the claim terms themselves as well as the rest of the claim language. See, e.g., '216 Patent, col. 15, ll. 5-7 ("providing registration key generating means adapted to generate a registration key") (emphases added).

What Uniloc declines to mention, however, is the fact that in Tehrani, the Federal Circuit remanded the case to the district court, stating:

> We agree with the parties that the structure corresponding to the processing function is the disclosed microprocessor that is programmed to perform the disclosed algorithm . . . .
>
> The district court, however, has not determined the precise algorithm that is part of the recited structure.

331 F.3d at 1362. Hence, the significance of the Federal Circuit's teachings on this issue appears clear – when software is linked to the disclosed function, the corresponding structure must be the specific algorithm disclosed in the patent, rather than just "an algorithm."

Applying these teachings, and having scrutinized the '216 Patent in detail, the Court concludes that the only algorithm specified in the '216 Patent for generating a licensee unique ID is found in the sixth embodiment, which states:

> The algorithm, in this embodiment, combines by addition the serial number 50 with the software product name 64 and customer information 65 and previous user identification 22 to provide registration number 66.

'216 Patent, col. 11, ll. 53-56. Similarly, the only hardware component disclosed for performing the stated function is a "summer." Id. at col. 12, ll. 62-65.

Uniloc additionally proposes use of the abbreviation "e.g." to convey the statutory requirement that equivalents of corresponding structures are within the scope of a means-plus-function claim.

The only case it has cited to support its position is Intertrust Techs., Inc. v. Microsoft Corp., 275 F. Supp. 2d 1031, 1059 (N.D. Cal. 2003). This is a specious argument because that court's use of the phrase "e.g." was not in the context of construing a means-plus-function claim. Uniloc is correct, however, that according to the Patent Act, "[means-plus-function claims] shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. § 112, ¶ 6 (emphasis added). In light of this statutory language and consistent with the Federal Circuit's inclusion of the phrase "and equivalents thereof" when construing means-plus-function claims, see, e.g., Texas Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193, 1209 (Fed. Cir. 2002), this Court finds it appropriate to include the phrase "and equivalents thereof" in the instant construction (as well as the construction of the other means-plus-function claim terms at issue in this litigation).[10]

Accordingly, these terms shall be construed as follows: **Function: to generate a local or remote licensee unique ID/registration key**; **Structure: a summation algorithm or a summer and equivalents thereof.**

[10] The question of what exactly constitutes an "equivalent thereof" raises an issue for another day (such as summary judgment or trial), as it involves, at least in part, a question of fact. See IMS Tech., Inc. v. Haas Automation, Inc., 206 F.3d 1422, 1430 (Fed. Cir. 2000) (equivalence under § 112, ¶ 6, is a question of fact).

Claim Term	Uniloc's proposed construction	Microsoft's proposed construction	Court's construction
9. Algorithm	Any set of instructions that can be followed to carry out a particular task	An explicitly encoded set of computer language instructions that manipulate data of some sort	**A set of instructions that can be followed to carry out a particular task**

Uniloc's construction is adopted from Microsoft's Computer Dictionary. Although Microsoft originally had proposed a construction similar to Uniloc's,[11] it now agrees that its dictionary should be used, but relies instead on a different portion of the dictionary's definition. The relevant portion of Microsoft's Computer Dictionary, attached as Exhibit D to Uniloc's claim construction brief, defines the term algorithm as:

> In the most general sense, **any set of instructions that can be followed to carry out a particular task**. For example, a recipe in a cookbook could be considered an algorithm. In computer usage, an algorithm can usually be explicitly encoded in a set of computer language instructions that manipulate data of some sort. There are many volumes of published algorithms covering a wide range of topics and applications, which are used in programming much as a recipe is used in cooking – as either a specific solution or a starting point for experimentation.

[11] Microsoft's first proposed construction was: "A sequence of steps that can be followed to achieve a desired result."

Because Uniloc's proposed construction (in bold) defines what an algorithm is, as opposed to Microsoft's proposed construction (underlined) which details where an algorithm may be encoded, the Court adopts Uniloc's construction: **A set of instructions that can be followed to carry out a particular task**.

Claim Term	**Uniloc's proposed construction**	**Microsoft's proposed construction**	**Court's construction**
10. Includes the algorithm utilized by said local licensee unique ID generating means to produce said licensee unique ID	The remote licensee unique ID generating means includes the algorithm used by the local licensee unique ID generating means and generates a licensee unique ID	The identical algorithm must be used locally and remotely to generate the licensee unique ID/security key/registration key/enabling key, and the algorithm cannot involve the use of encryption or decryption technology	**Includes the identical algorithm used by the local licensee unique ID generating means to produce the licensee unique ID**

The parties' proposed constructions here highlight two main disagreements. The first focuses on whether the algorithm utilized on the local side to generate the licensee unique ID must be the same as the algorithm utilized on the remote side to generate the licensee unique ID. This initial dispute was, for the most part, resolved at the Markman hearing. There, the parties both confirmed that the algorithm is indeed the same on both sides, but Uniloc expressed its concern that this should not imply that the code in which the algorithm is buried is necessarily the same on both sides

(Microsoft then agreed that the code does not necessarily have to be the same on both sides). The Court notes too that treatment of the algorithm as identical is fully supported by the specification and prosecution history. See '216 Patent, col. 3, ll. 3-4 (explaining that the algorithm in the code portion is "duplicated at a remote location"); id. at col. 7, ll. 21-35 (explaining that the "identical registration number algorithm 14 resides on the registration authority PC"); UNILOC 0129 ("the underlying algorithms which process identifying information input into both the local licensee unique ID generating means and the remote licensee unique ID generating means are the same").

The second disagreement surrounding these claim terms is based upon Microsoft's assertion that, during the patent prosecution, Uniloc disclaimed the use of encryption and decryption technology. In making this argument, Microsoft hawks the following passages of the prosecution history in which the applicant was setting forth various reasons for distinguishing the prior art:

> In addition, the Grundy system requires a mechanism for encrypting the registration code for its return trip from the second platform to the first platform: . . . Advantageously, the system of the claimed invention does not require that an encryption key be passed from the second platform to the first platform.
>
> * * *
>
> By contrast, the invention of the present application does not require any decryption key to pass from the second platform (the remote location) to the first platform (the local location) because the same algorithm is used at both locations. This feature is now

> clearly included in all proposed main claims, and, it is submitted, patentably distinguishes the present invention over Grundy.
>
> * * *
>
> There is not a mere matter of protocol distinguishing Applicant's claimed system from the Grundy system: there is a fundamental difference in operation between the two systems.

UNILOC 0145-0146. Having reviewed this portion of the prosecution history, the Court does not find these statements to be so clear and unmistakable as to constitute prosecution disclaimer. Most importantly, in distinguishing the prior art, the applicant consistently explained that the present invention does not require the use of an encryption key. For disclaimer purposes, this wording is vastly different than the applicant proclaiming that the present invention does not at all use encryption technology. Simply put, the language in these statements is too vague or broad to qualify as complete disavowal.

Accordingly, the Court construes this term as follows: **Includes the identical algorithm used by the local licensee unique ID generating means to produce the licensee unique ID**.

Claim Term	**Uniloc's proposed construction**	**Microsoft's proposed construction**	**Court's construction**
11. Generated by a third party means of operation of a duplicate copy of said registration key generating means	Function: generating an enabling key; Stucture: software (e.g. program code) or hardware (computer logic) Generating an enabling key by a third party	A duplicate copy of the registration key generating means is present on the remote side, and generates the enabling key. The registration key generating means cannot involve the use of encryption or decryption technology	**Generated by a third party's use of a duplicate copy of the registration key generating means**

This claim term, which was designated by Microsoft for construction, presents an apparent conflict as to whether the term should be construed pursuant to 35 U.S.C. § 112, ¶ 6, because Uniloc originally proposed a construction that in part has a functional and structural component. But whether there is truly a conflict over means-plus-function treatment is debatable. For one, despite the voluminous briefing in this case, neither party has set forth why 35 U.S.C. § 112, ¶ 6, should or should not apply. Instead, the focus of the parties' arguments, in written briefing and at the Markman hearing, has only been on two areas of Microsoft's proposed construction: use of the phrase "duplicate copy of" and use of encryption and decryption technology. It could

be said, therefore, that these two disputes are the ones to be resolved. See Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc., 200 F.3d 795, 803 (Fed. Cir. 1999) ("only those [claim] terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy"). Second, while Uniloc originally provided a construction of this term that included functional and structural components, its proposed construction also contains what appears to be a construction based upon standard construction principles - "generating an enabling key by a third party."

Yet, the Court concludes that to the extent that the scepter of means-plus-function treatment has been raised, this term should not be construed pursuant to 35 U.S.C. § 112, ¶ 6. While the disputed claim term does contain two instances of the word "means," the entire clause to be construed, beginning with the word "generated," is much broader than one discrete means-plus-function term. Moreover, while the word "means" does appear twice in the disputed term, one instance is in the context of the term "registration key generating means," which has already been construed by this Court as a means-plus-function term. The other instance of the word "means" appears in the phrase "third party means of operation" (which has not been submitted on its own as a disputed claim term). The Court concludes, however, that "third party means of operation" simply denotes that the remote location uses a duplicate copy of the registration key generating means.

And despite Uniloc's initial effort to link the function of generating an enabling key to the "third party means," it is clear from the language of the claims that the registration key generating means actually performs this function. Thus, the Court finds that this claim term is not expressed in means-plus-function form so as to invoke the advantages (and disadvantages) of 35 U.S.C. § 112, ¶ 6. See Waterloo Furniture Components, Ltd. v. Haworth, Inc., 798 F. Supp. 489, 494 (N.D. Ill. 1992) (holding "that the use of the word 'means' in a claim does not as a matter of law refer to an element expressed in means-plus-function form").

Turning then to construction of this claim term under the standard rules of claim construction, the Court notes that the arguments raised by the parties are the same arguments surrounding the disputed claim terms "algorithm" and "includes the algorithm utilized by said local licensee unique ID generating means to produce said licensee unique ID." That is, whether the registration key generating means on the remote side is a duplicate copy of the one on the local side, and second, whether encryption and decryption technology was disclaimed during the prosecution history. As for the word "duplicate," it is directly from claim 17 and thus, an appropriate limitation. As to Microsoft's proposed language prohibiting the use of encryption and decryption technology, it will not be adopted as the Court's previous discussion of this matter is equally applicable here.

Accordingly, this term shall be construed as follows: **Generated by a third party's use of a duplicate copy of the registration key generating means**.

B. Modes/mode switching means

Claim Term	**Uniloc's proposed construction**	**Microsoft's proposed construction**	**Court's construction**
12. Use mode	Use of the digital data or software in accordance with the license	Use of the digital data or software by its execution on a platform so as to fulfill the seller's/licensor's obligations in relation to the sale or license of the right to execute the digital data or software in the use mode. The use mode is to be distinguished from what might generally be termed unlicensed modes of operation (which is not to say unauthorized modes of operation) as typified by demonstration modes	**A mode that allows full use of the digital data or software in accordance with the license**
13. Fully enabled mode/full version run	A mode allowing unrestricted use in accordance with the license	A mode/version in which full functionality of the software is available	**A mode/version that allows full use of the digital data or software in accordance with the license**
14. Partly enabled or demonstration mode	A mode that is more restricted than a fully enabled mode	A mode in which some functions are disabled for purposes of demonstrating aspects of the software to a person who is not presently a licensee, but who may in the future choose to license it	**A mode that allows partial use of the digital data or software**

As an initial matter, the Court concludes that the terms "use mode" and "fully enabled mode/full version run" mean the same

thing. At the Markman hearing, Microsoft readily agreed that these terms are synonymous. Uniloc, however, was hesitant to agree to synonymous treatment on the spot. But importantly, when pressed by the Court, Uniloc was once again unable to offer an example of a situation when "fully enabled mode" would mean anything other than "use mode." So, although Uniloc has not explicitly agreed that these terms are synonymous, Uniloc has been unable to make an argument, compelling or otherwise, that the terms deserve different treatment. Moreover, the Court observes that Uniloc's proposed constructions for these terms do not vary materially. While Uniloc has included the word "unrestricted" in its construction of the term "fully enabled mode," there is nothing to indicate that "use mode" is restricted in any way other than the scope of the license. Indeed, Uniloc's own expert, David Klausner, stated that use mode is an unrestricted mode:

> One of ordinary skill in the art recognizes the patent relates to the use of software or digital data in a restricted or unrestricted mode (use mode/non-use mode). The terms "fully-enabled mode" and "full version run" are used similar to "use mode" to mean allowing unrestricted use in accordance with the license.

Klausner Decl. at ¶ 18. Moreover, the specification discusses these terms in a similar context by explaining that they are the converse of the term "partly enabled or demonstration mode." Compare '216 Patent, col. 2, ll. 44-48 ("The use mode is to be distinguished from what might generally be termed unlicensed modes of operation (which is not to say unauthorized modes of operation)

as typified by the demonstration modes later described in this specification"), with id. at col. 15, ll. 1-5 (explaining that the mode switching means switches software between a fully enabled mode on the one hand, and a partly enabled or demonstration mode on the other).

Turning then to the parties' proposed constructions, the main point of disagreement is whether the difference between the full and demonstration modes involves only functional limitations (such as limitations on the ability to save or print a document), or whether the claim terms should be construed broadly enough to encompass temporal limitations as well (such as only being able to use the software for two days). In support of its argument that the demonstration mode only involves functions being disabled, Microsoft cites portions of embodiments 1 and 5. See id. at col. 6, ll. 47-48 (explaining that "a demonstration of the software (which typically has features such as save and/or print disabled)"); id. at col. 11, ll. 14-17 (stating that the "[t]he registration code portion 38 can include a preview or demonstration related to a subset of the balance of the digital data on the CD 54 which can be executed by the platform without license"). But while these embodiments discuss characteristics which a demonstration mode can have, or typically has, the Court declines to read these examples from two embodiments to mandate that in all instances, the demonstration mode only can involve functional limitations. See

generally Phillips, 415 F.3d at 1323 (the general rule is that "persons of ordinary skill in the art rarely would confine their definitions of terms to the exact representations depicted in the embodiments."). For these reasons, the words "functionality" and "functions are disabled" will not be part of the Court's construction of these terms.

Instead, the Court determines that the use and fully enabled modes are best described as allowing "full use" of software "in accordance with the license." This language is consistent with the specification's explanation of the term "use mode," see '216 Patent, col. 2, ll. 40-48 (explaining that use mode refers to use of the digital data or software so as to fulfill the licensor's obligations), as well as the specification's general guidance that once the registration routine is complete, "full access to the software is allowed." Id. at col. 8, l. 28.

Accordingly, the terms "use mode" and "fully enabled mode/full version run" shall be construed as: **A mode that allows full use of the digital data or software in accordance with the license**.[12]

For the same reasons, because the term "partly enabled or

[12] Although Microsoft agreed that the terms "use mode" and "fully enabled mode/full version run" should be treated the same, it did not specify which of its proposed constructions was preferable in that event. Nonetheless, to the extent Microsoft may have intended to press its proposed construction of "use mode," this writer notes that the Court's construction incorporates the limitation expressed therein: that use mode means using the data in accordance with the obligations imposed by the license.

demonstration mode” is the flip side of use mode/fully enabled mode, it shall be construed as: **A mode that allows partial use of the digital data or software**.

Claim Term	Uniloc's proposed construction	Microsoft's proposed construction	Court's construction
15. Mode switching means	Function: to permit the data to run in a use mode; Structure: software (e.g. program code) or hardware (e.g. comparator)	This term is construed and applied in accordance with 35 U.S.C. § 112, ¶ 6 With regard to the functional aspects of this term, the digital data can only be used in the use mode if the locally generated licensee unique ID is generated before the remotely generated licensee unique ID, and the two match (claim 1) With regard to the functional aspects of this term, the software can only be used in the fully enabled mode if the locally generated registration key matches identically with the remotely generated enabling key provided by the mode-switching means by the intending user (claim 17) With regard to the functional aspects of this term, the digital data can only be used in the use mode if the locally generated licensee unique ID matches the remotely generated licensee unique ID (claims 19 and 20) The sole corresponding structure disclosed in the specification for performing the function of this term is a comparator	**Function: to permit the digital data or software to run in a use mode/fully enabled mode if the locally generated licensee unique ID/registration key matches with the remotely generated licensee unique ID/enabling key** **Structure: program code which performs a comparison of two numbers or a comparator and equivalents thereof**

All are in agreement that this term is subject to construction pursuant to 35 U.S.C. § 112, ¶ 6. The parties part paths at the

functional component though, with Uniloc proposing one functional construction for this term, and Microsoft setting forth three separate functional constructions to account for differences in the language of claims 1, 17, 19. and 20. Uniloc objects that Microsoft's is an unwieldy and "gargantuan" construction, while Microsoft criticizes Uniloc for ignoring multiple claim limitations. Specifically, Microsoft feels that in construing the appropriate function of this claim term, it is necessary to emphasize the temporal aspect of when the local licensee unique ID is generated in claim 1, and the fact that in claim 17 the remotely generated enabling key is provided to the mode switching means by the intending user. While these limitations are in the respective claims, the Court concludes that they relate to the generation of the licensee unique ID and the method by which the enabling key is provided to the mode switching means, not the function that the mode switching means is meant to serve. These limitations in claims 1 and 17, therefore, are ultimately tangential to the narrow task of defining the function of the term mode switching means, which the Court concludes is to permit the digital data or software to run in a use mode/fully enabled mode if the locally generated licensee unique ID/registration key matches with the remotely generated licensee unique ID/enabling key.

As to the corresponding structure, the specification discloses both hardware, in the form of a comparator, see '216 Patent, col.

13, ll. 37-40 ("[c]omparator 90 together with gates 91, 92 and relay 93 comprise one particular form of mode switcher or switching platform 83 of various kinds of code such as the code of types D and U"), and software, in the form of code. Id. at col. 6, ll. 12-14 ("[m]ode switching means can comprise execution of the code portion which additionally performs a comparison of the locally and remotely generated registration numbers"). And, upon reviewing the specification, these disclosures only provide for code which specifically compares two numbers to determine whether they are the same. Even so, Uniloc objects to Microsoft's proposal of limiting the structure to a comparator by reiterating the same arguments it made in connection with the term "local licensee unique ID generating means": that use of the abbreviation "e.g." is appropriate and that the structure should not be limited solely to a comparator because 35 U.S.C. § 112, ¶ 6, mandates that equivalents of corresponding structures are within the scope of a means-plus-function claim. For the same reasons already laid out by the Court in its construction of "local licensee unique ID generating means," however, the Court declines to adopt Uniloc's proposed use of the general phrase "program code" as well as the abbreviation "e.g." but will incorporate the phrase "and equivalents thereof" as part of its construction.

Accordingly, this term shall be construed as follows: **Function: to permit the digital data or software to run in a use**

mode/fully enabled mode if the locally generated licensee unique ID/registration key matches with the remotely generated licensee unique ID/ enabling key; Structure: program code which performs a comparison of two numbers or a comparator and equivalents thereof.

Claim Term	**Uniloc's proposed construction**	**Microsoft's proposed construction**	**Court's construction**
16. Has matched	Corresponds with or is a counterpart to	A direct comparison between the locally generated licensee unique ID/registration key and the remotely generated licensee unique ID/enabling key shows that the two are the same	**A comparison between the locally generated licensee unique ID/registration key and the remotely generated licensee unique ID/enabling key shows that the two are the same**

This term, which appears in claims 1, 17, and 19, expresses the concept that in order for digital data or software to be used in a use mode/fully enabled mode, the licensee unique ID that was generated locally must have "matched" the licensee unique ID that was generated remotely. Uniloc attacks Microsoft's proposed construction by invoking the rule of claim differentiation to point out that claim 17 uses the phrase "has matched identically" while claims 1 and 19 simply use the phrase "has matched." So the argument goes that in claim 17 the match must be identical (100%

the same), while the match in claims 1 and 19 need not be. Further, Uniloc makes a common sense argument by pointing out that two things can "match," such as articles of clothing, yet not be the "same."[13]

The doctrine of claim differentiation "is not a hard and fast rule of construction." Seachange Int'l, Inc. v. C-COR Inc., 413 F.3d 1361, 1369 (Fed. Cir. 2005) (quoting Kraft Foods, Inc. v. Int'l Trading Co., 203 F.3d 1362, 1368 (Fed. Cir. 2000)). Instead, application of the doctrine only creates a presumption that may be overcome "by a contrary construction dictated by the written description or prosecution history." Id. Here, the Court concludes that the presumption created by applying the doctrine of claim differentiation withers under the glare of the intrinsic evidence, and further, that the intrinsic evidence supports a construction that the licensee unique IDs be the same for matching purposes. For one, the specification contemplates that the locally and remotely generated licensee unique IDs will "equal" each other. See '216 Patent, col. 13, ll. 4-17. Second, the matching requirement reflects that the algorithm and inputs used to generate

[13] Thankfully though, the '216 Patent does not relate to clothing, thus keeping the Court far away from the oftentimes arduous task of deciding whether a particular shirt "matches" a particular pair of pants and tie, not to mention whether a particular belt or pair of shoes "matches" an ensemble. Fortunately for this Court, the robe hides a multitude of fashion sins; and this Court's sense of what "match" means will revolve around the extent of identity, not the degree of good taste.

the licensee unique IDs on the local and remote sides are the same. See, e.g., UNILOC 0129 ("This matching requirement reflects the fact that the underlying algorithms which process identifying information input into both the local licensee unique ID generating means and the remote licensee unique ID generating means are the same and that both ID generating means rely upon the same information to generate the licensee unique ID.") (emphases added); '216 Patent, col. 7, ll. 8-35. Thus, since the same algorithms rely on the same information, the Court is hard-pressed to imagine a scenario (and one has not been suggested by either party) where it would necessarily follow that the resulting licensee unique IDs are not the same. Finally, at the Markman hearing, the Court notes that Uniloc was unable to explain what exactly differentiates claims 1 and 19 from claim 17 so as to not require identical matching in claims 1 and 19.

Based upon the foregoing, this term shall be construed as follows: **A comparison between the locally generated licensee unique ID/registration key and the remotely generated licensee unique ID/enabling key shows that the two are the same**.[14]

[14] The Court declines to add Microsoft's suggested limitation that the comparison must be "direct" as the inclusion of this limitation is simply not sufficiently supported by the intrinsic evidence.

Claim Term	Uniloc's proposed construction	Microsoft's proposed construction	Court's construction
17. Mode switching means will permit said data to run in said use mode in subsequent execution only if said platform unique ID has not changed	The mode switching means will allow the program to keep running as long as the platform unique ID has not changed	The mode switching means will permit the data to run in the use mode only if the platform unique ID is identical to what it was the previous time the digital data were run	**The mode switching means will permit the data to run in the use mode only if the platform unique ID is identical to what it was the previous time the digital data were run**

Here, the dispute centers around the phrase "has not changed." Uniloc takes the position that the phrase should remain as is, primarily because Uniloc believes that there is a certain level of tolerance built into the mode switching means that allows for some changes in the computer environment. But although Uniloc proposes keeping the language "has not changed," it actually reads the phrase to mean something similar to "has not changed enough so as to prevent the data from running in the use mode." Microsoft disagrees with Uniloc's theory, arguing that the phrase "has not changed" should be interpreted to mean that the platform unique ID must be "identical" to what it was the previous time the software was run.

In resolving this issue, the Court notes that the summary of the invention explains as a general matter that the system of the '216 Patent "includes means for detecting when parts of the platform on which the digital data has been loaded has changed in part or in entirety as compared with the platform parameters when the software or digital data to be protected was for example last booted or run or validly registered." '216 Patent, col. 2, ll. 56-60. Thereafter in the '216 Patent, however, neither party has been able to point to any language which makes a distinction between partial and entire change. The specification, after the summary of the invention, simply refers to "a change" and "no change":

> With reference to FIG. 3, whenever the protected application boots, a check is made by the registration routine to determine whether registration details exist in the key file of the protected application. If they do, a comparison is made by the registration routine between what is stored in the key file and the environment to determine whether a change has taken place to the environment as compared with what is stored in the key file. If no change is detected, then the protected application is permitted to run normally.

Id. at col. 8, ll. 66-67 - col. 9, ll. 1-7 (emphases added). This use of the all encompassing phrase "a change," coupled with the unequivocal language of "no change," is strong evidence that the phrase "has not changed" in claim 7 refers to any change whatsoever, whether partial or entire. And of course, the fact that no distinction between partial or entire change is made in claim 7 (while awareness of the difference is made clear in the

summary of the invention) bolsters a construction that the platform unique ID must be identical.

Accordingly, this term shall be construed as follows: **The mode switching means will permit the data to run in the use mode only if the platform unique ID is identical to what it was the previous time the digital data were run**.

Claim Term	**Uniloc's proposed construction**	**Microsoft's proposed construction**	**Court's construction**
18. Registration system	A system that allows digital data or software to run in a use mode on a platform when an appropriate licensing procedure is followed	A system that allows digital data or software to run in a use mode on a platform if and only if an appropriate licensing procedure has been followed	**A system that allows digital data or software to run in a use mode on a platform if and only if an appropriate licensing procedure has been followed**

This battle pits the word "when" against the phrase "if and only if," neither of which appear in the claims themselves. Microsoft amply defends its position, however, by pointing out that the specification continuously and consistently uses the phrase "if and only if" to describe the registration system. See '216 Patent, Abstract ("A registration system allows digital data or software to run in a use mode on a platform if and only if an appropriate licensing procedure has been followed"); id. at col. 2, ll. 52-55

("[i]n broad terms, the system according to the invention is designed and adapted to allow digital data or software to run in a use mode on a platform if and only if an appropriate licensing procedure has been followed"); id. at col. 5, ll. 47-51 ("the system according to embodiments of the invention is designed and adapted to allow digital data 39 or software to run in a use mode on a platform 31 if and only if an appropriate licensing procedure has been followed").

Uniloc's position, by comparison, is much less defensible. As an initial observation, the Court notes that Uniloc itself used the phrase "if and only if" to describe the registration system of the patented technology in its opening claim construction brief. Also, while Uniloc points out that only the first embodiment uses "if and only if," it is unable to show how any other embodiment, or section of the specification for that matter, contemplates either a reading contrary to that proposed by Microsoft or consistent with the use of the word "when." Finally, Uniloc's attempt to rely on claim differentiation is unavailing. While claim 19 states "only if a licensee unique ID," the phrase "only if" in claim 19 is well-removed from the term "registration system" and at most, is referring specifically to mode-switching means permitting the use of data in a use mode, not generally to the term "registration system."

Accordingly, based upon the consistent use of the phrase "if and only if" in the specification, coupled with the fact that there is nothing in the specification to indicate that the patentee contemplated an alternative description to the broad one explicitly set forth in the '216 Patent, this term shall be construed as follows: **A system that allows digital data or software to run in a use mode on a platform if and only if an appropriate licensing procedure has been followed**.

C. User interaction requirements

Claim Term	**Uniloc's proposed construction**	**Microsoft's proposed construction**	**Court's construction**
19. Provided to said mode-switching means by said intending user	Plain meaning	A person who is not presently a licensee, but who intends in the future to license the digital data, provides the enabling key to the mode-switching means	**Provided to the mode-switching means by the person who intends to become a licensee**
20. Communicated to said intending user	Plain meaning	The enabling key is communicated to a person who is not presently a licensee, but who intends in the future to license the digital data	**Communicated to the person who intends to become a licensee**

Here again, Uniloc objects to Microsoft's construction by arguing that the user, even before registering, is already using the software pursuant to the license when he or she initially loads the software onto his or her computer. This Court, however, finds that the previous construction of claim term numbers 4 and 5 and the accompanying discussion of "intending" and "intended" are equally applicable to the instant terms because Claim 17 employs the term "intending user" to refer to a person on the eve of completing the registration process so as to switch the software into the fully enabled mode. For that reason, the expectation of the user is not to be just an unlicensed user with only access to the partly enabled mode or demonstration mode of the software. By virtue of the fact that he or she is completing the registration process, the user has already loaded the software onto his or her computer and had access to the software in a limited mode. Instead, the "intending user" in claim 17 expects in the future to complete the registration process so as to become a licensee and access the fully enabled mode of the software.

For these reasons, these terms shall be construed as follows: **Provided to the mode-switching means by the person who intends to become a licensee;** and **Communicated to the person who intends to become a licensee**.

D. Claim 12 and its dependent claims

Claim Term	**Uniloc's proposed construction**	**Microsoft's proposed construction**	**Court's construction**
21. Checking by the registration authority that information unique to the user is correctly entered	Verifying that the information entered by the user is the information unique to the user	The remote side checks to ensure that information unique to the user was entered by the user without errors or mis-entry, with respect to how the user intended to enter it	**Verification by the registration authority that information unique to the user and entered by the user is accurate**

The first dispute here arises due to Microsoft's contention that the checking must be done on the remote side. Because claim 12 simply states that checking is done by the registration authority and not at the registration authority, and in the absence of Microsoft offering intrinsic evidence to support its commonsense reading, this Court declines to include the limitation that the checking is necessarily done on the remote side.

The next dispute centers upon that part of Microsoft's proposed construction focusing on the user's intent, with Uniloc arguing "it would place an impossible burden of proof on Uniloc to somehow prove the intent of the user when entering the unique information." The Court, however, finds that Uniloc's concerns are not entirely well-founded because the intent of the user in this

situation is not a metaphysical concept, but instead, is discerned by comparing information unique to the user to the information that was input by the user. Nevertheless, the Court agrees that a construction emphasizing the user's intent deviates from the language of claim 12.

Accordingly, upon reviewing the language of claim 12 and considering the ordinary meaning of the terms at issue,[15] this claim term shall be construed as follows: **Verification by the registration authority that information unique to the user and entered by the user is accurate.**

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[15] A general use dictionary provides in part:

> **correct** adj . . . 1: conforming to an approved or conventional standard 2: conforming to or agreeing with fact, logic, or known truth 3: conforming to a set figure <enclosed the ~ return postage> – correctly . . . adv
>
> syn CORRECT, ACCURATE, EXACT, PRECISE, NICE, RIGHT mean conforming to fact, standard or truth. CORRECT usu. implies freedom from fault or error <*correct* answers> <socially *correct* dress>. ACCURATE implies fidelity to fact or truth attained by exercise of care <an *accurate* description>. EXACT stresses a very strict agreement with fact, standard, or truth <*exact* measurements> . . .

Merriam-Webster's Collegiate Dictionary 259-60 (10th ed. 2002).

Claim Term	Uniloc's proposed construction	Microsoft's proposed construction	Court's construction
22. Wherein said registration system is replicated at the registration authority	Wherein the registration authority also has a system that generates a security key	The registration system and all of its features and capabilities, including the features of generating a security key and checking that the information unique to the user is correctly entered at the time that the security key is generated, must be present on both the local and the remote sides. Generating a security key cannot involve the use of encryption or decryption technology.	**Wherein the registration system attachable to software to be protected is reproduced exactly at the registration authority**

Uniloc, without citing to intrinsic evidence, seemingly wishes to generalize the language of this claim term such that, under its construction, any registration system on the remote side would be adequate so long as it is a registration system capable of generating a security key. This ignores, however, the fact that claim 12 unambiguously states that "said registration system," i.e., "a registration system attachable to software to be protected," '216 Patent, col. 14, ll. 40-41, "is replicated" at a

remote location. The verb "replicated" means: "DUPLICATE, REPEAT . . . to undergo replication : produce a replica of itself." Merriam-Webster's Collegiate Dictionary 989 (10th ed. 2002). In turn, a "replica" is "an exact reproduction . . . a copy exact in all details." Id. This claim term, therefore, does not contemplate just any registration system capable of generating a security key, but instead, envisions a replica of the registration system first recited in claim 12.

Turning to Microsoft's proposed construction, the Court declines to adopt that portion focusing on the specific functions performed by the registration system as the intrinsic evidence does not support a reading that the registration system first recited in claim 12 necessarily performs a "checking" function by itself. Moreover, Microsoft's proposed language prohibiting the use of encryption and decryption technology will not be adopted as the Court's previous discussion of this matter is equally applicable here.

Accordingly, this term shall be construed as follows: **Wherein the registration system attachable to software to be protected is reproduced exactly at the registration authority**.

Claim Term	Uniloc's proposed construction	Microsoft's proposed construction	Court's construction
23. Serial number	A number generated from information from the computer environment	A number that is one of a series	**A number that is one of a series**

This claim term appears in claim 14, which reads in relevant part:

> wherein said registration number algorithm combines information entered by a prospective registered user unique to that user with a serial number generated from information provided by the environment in which the software to be protected is run.

'216 Patent, col. 14, ll. 52-56. From claim 14, therefore, it is clear that the serial number is a number generated from computer environment information, which obviously forms the basis of Uniloc's proposed construction. Microsoft, however, points out that Uniloc's proposal reads the word "serial" out of the claim term and simply adds a layer of redundancy to the language of claim 14. This Court agrees and finds that the ordinary meaning of the term "serial number" is readily apparent from its widely accepted definition.

Accordingly, this term shall be construed as follows: **A number that is one of a series**.

E. Platform unique ID generating means

Claim Term	**Uniloc's proposed construction**	**Microsoft's proposed construction**	**Court's construction**
24. Platform unique ID generating means	Function: to generate a platform unique ID; Structure: software (e.g. program code) or hardware (computer logic)	This term is construed and applied in accordance with 35 U.S.C. § 112, ¶ 6. The functional aspect of this term requires the generation of a one-of-a-kind identifier of a platform. There is no corresponding structure disclosed in the specification for performing the function of this term. As such, all claims that include this term or depend from such claims are invalid as indefinite	**Function: to generate a platform unique ID** **Structure: a summation algorithm or a summer and equivalents thereof**

All agree that this term is a means-plus-function term subject to treatment under 35 U.S.C. § 112, ¶ 6, and that the function of this term is to generate a platform unique ID.[16] As to the structure, Uniloc contends that the corresponding structure for

[16] For the same reasons previously discussed, the Court declines to include the limitation that the uniqueness of the platform ID must be "one-of-a-kind."

carrying out this term's function is described in figure 8 of the '216 Patent which is a box labeled 70 that is identified as a "Platform Unique I.D. Generator." In addition, Uniloc points to various portions of the '216 Patent, including col. 5, ll. 61-67; col. 10, ll. 48-53; col. 11, ll. 43-57; col. 12, ll. 62-65, and, relying on its expert, David Klausner, asserts that one of ordinary skill in the art would appreciate that the same software logic that generates a licensee unique ID may be used to generate a platform unique ID. Microsoft argues, however, that the specification discloses no structure corresponding to the recited function because generic references to software logic and black boxes merely indicate the function to be performed but not adequate structure to perform it. Microsoft likewise argues that Uniloc's attempt to associate licensee unique ID generation to platform unique ID generation is conclusory and not supported by the specification.

To determine whether a disclosure of structure is sufficient, the Court should ask "first whether structure is described in the specification, and, if so, whether one skilled in the art would identify the structure from the description." Atmel Corp. v. Info. Storage Devices, Inc., 198 F.3d 1374, 1381 (Fed. Cir. 1999). While it is true that the inventor need not disclose all details of structures well known in the art, "the specification must nonetheless disclose some structure." Default Proof Credit Card Sys., Inc. v. Home Depot U.S.A., Inc., 412 F.3d 1291, 1302 (Fed.

Cir. 2005). "[O]nce some structure in the specification is identified, even if that structure is a black box, the proper inquiry then turns to whether the ['216] patent discloses sufficient structure with which one skilled in the art could use to perform the function." Intel Corp. v. Broadcom Corp., 172 F. Supp. 2d 516, 532 (D. Del. 2001) (citing S3, Inc. v. nVIDIA Corp., 259 F.3d 1364, 1370-71 (Fed. Cir. 2001)). In this case, the structure disclosed is software logic, see, e.g., '216 Patent, col. 3, ll. 54-55, and the box in figure 8 labeled as a "platform unique I.D. generator." The proper inquiry, therefore, is "whether one skilled in the art would identify the structure from that description" provided in the specification. Default Proof, 412 F.3d at 1301.

In answering this question, this Court admittedly is unable to determine on its own whether one skilled in the art would identify the structure from this description. To this end, Uniloc has submitted the declaration of its expert, David Klausner, who explains that one skilled in the art would readily understand that the structure used to generate licensee unique IDs could also be used to generate platform unique IDs. Microsoft takes issue with this declaration, not by submitting its own expert declaration, but instead by arguing that general software logic is an insufficient corresponding structure. This is unpersuasive, however, because the declaration links the structure to the specific summation algorithm already found to correspond sufficiently to the

generation of a licensee unique ID. Moreover, to the extent that Microsoft contends that the testimony of one of ordinary skill in the art cannot supplant the total absence of structure from the specification, this Court concludes that this claim term does not present a situation where there is a total absence of structure; as discussed, the '216 Patent discloses as structure software logic and a "platform unique ID generator."

For these reasons, this term shall be construed as follows: **Function: to generate a platform unique ID**; **Structure: a summation algorithm or a summer and equivalents thereof.**

III. Conclusion

With the disputed claim terms construed, the parties shall comply with the briefing schedule as modified by the Court on July 24, 2006.

IT IS SO ORDERED.

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William E. Smith
United States District Judge

Date: